

### INSTALLATION INSTRUCTIONS FOR COA-42801 TF-727 "SUPER SPRAG"

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**Kit Includes:**

- Bolt-in style cam
- Inner race
- Spring retainer w/ springs
- 16 rollers
- 4 - 8mm X 30mm-M6X1 (Requires 4mm Allen wrench) shoulder bolts
- 4 - 5/16" Flat Washers and 4 - 5/16" Lock Washers

This 16 roller bolt-in one-way clutch is a direct replacement for the OEM press in roller clutch or aftermarket 12-roller bolt-in style clutches. Installation of this kit will require complete disassembly of the transmission and should be performed by an experienced transmission technician. Prior to removal of existing low roller clutch cam, remove the OEM set screw cam retainer. This set screw is located perpendicular to the cam bore facing the bottom of the transmission case. The set screw may be omitted during reassembly. (FIGURE 3)

1. Once the transmission is completely disassembled, the existing cam must be removed from the case by inserting a punch through one of the rear support boltholes and tapping. Alternate between the four rear support holes to evenly tap the cam out of the case. Your new cam will be retained in the case by using the four rear support boltholes in addition to a press fit on its outer diameter.
2. The existing rear support boltholes must be enlarged to accommodate the shoulder bolts, which will be used to accurately retain both the cam and the rear support. Using a 8 mm preferred or 21/64" drill, enlarge the four existing holes in the case making sure to drill them as straight as possible. If these holes are not straight, the shoulder bolts will not be aligned properly and may not thread into the cam. (FIGURE 1)
3. Once the holes are enlarged, the cam may be installed into the case. The outer diameter has a lead machined on the serrations to aid installation. (FIGURE 2)

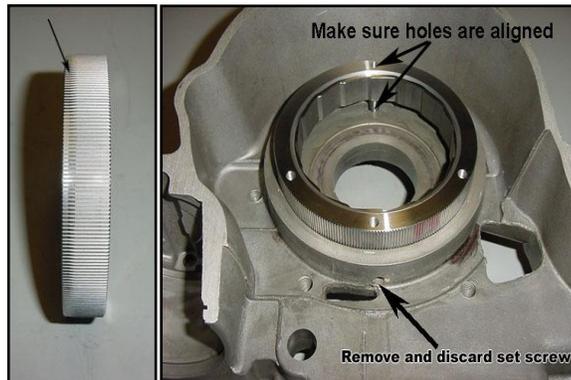
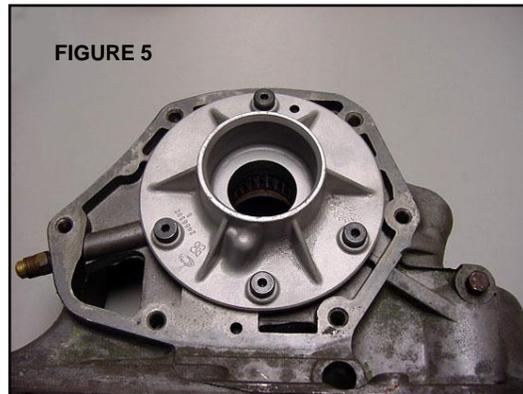
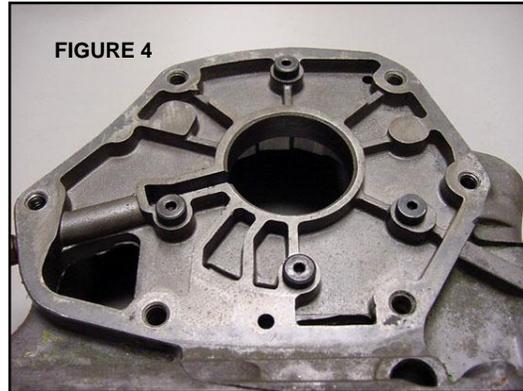


FIGURE 2

FIGURE 3



4. Install this lead towards the rear of the case, making sure each of the four holes are aligned. (FIGURE 3)
5. Confirm proper alignment by threading each of the four bolts into the cam (without the rear support installed). (FIGURE 4)
6. Use the four bolts to begin drawing the cam into the case by alternately snugging each and then tapping on the cam with a hammer (DO NOT USE A METAL HAMMER DIRECTLY ON THE CAM, USE EITHER A RUBBER MALLET, BRASS HAMMER/PUNCH). As the cam begins to move in the case, keep alternately tightening the four bolts.
7. Be certain that the cam is fully installed and sits flat against the back of the case. If so, remove the four shoulder bolts.
8. Now the rear support may be installed and retained to the case by reinstalling the four shoulder bolts. using 2 washers under the head of each. Tighten the bolts to 100 inch-lbs. (FIGURE 5)
9. The final step is assembly of the roller clutch. Place the spring retainer in the cam making sure it is locked against the lobes of the cam. Finally place the inner race in the center of the retainer and install the 16 rollers such that the springs preload them against the lobes of the cam. (FIGURE 6)



If you have any questions regarding the proper installation and/or operation of a Coan Racing product, please call (765) 456-3957. You may also fax us at (765) 456-3960, or e-mail at [coan@coanracing.com](mailto:coan@coanracing.com).

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